

REMARKS

These remarks are in response to the Office Action dated May 9, 2003, which has a shortened statutory period for response set to expire August 9, 2003. A one-month extension of time, to expire September 9, 2003, is requested in a petition filed herewith.

Interview Summary

An Examiner's Interview was held June 9, 2003 between Applicants' attorney, Larry E. Henneman, Jr., Examiner Christina Marks, and Primary Examiner Michael O'Neill. U.S. Patent No. 5,221,081 (Rooks) was discussed as applied to Claims 1, 34, and 56. Examiner Marks indicated that the term "two-dimensional array" was being interpreted broadly to include the linear arrangement of the launch devices of Rooks (i.e., a 1x3 array). Agreement was reached that if Claims 1, 34, and 56 are amended to state that there are at least two launch devices in each of the two dimensions of the array, then the claims of the present application would no longer be anticipated by Rooks. Applicants agree with the description of the substance of the interview as set forth by the Examiner in the Interview Summary mailed June 10, 2003. Further, Applicants appreciate the Examiners' time in preparing for and participating the interview.

Claims

Claims 1-56 are pending in the above-identified application. Claims 1-56 are rejected over prior art. Claims 1, 2, 34, and 56 are amended and Claims 3-33 and 35-55 remain as filed. Reconsideration is requested.

Applicants would like to thank the Examiner for her thorough examination of the pending claims, and for her clear statement of grounds for rejection. Citing particular columns and line numbers of the prior art references was particularly helpful.

Claim Objections

The Examiner objects to Claims 2-8 because Claim 2 lacks antecedent basis for "said ball" at line 3. Claim 2 is amended herein to recite "a ball" at line 3 to provide antecedent basis for subsequent occurrences of the term "ball." Therefore, Applicants respectfully request withdrawal of the objection to Claims 2-8.

Claims 45-55 are objected to by the Examiner for not being in the proper form for a dependent claim. The Examiner writes: "As written, the claims are conceivable as both an independent or dependent claim." Applicants respectfully traverse.

Claims 45-55 each incorporate limitations of a respective one of Claims 34-44, and cannot therefore be considered an independent claim. Further, claims in the form of Claims 45-55, are routinely allowed by the Office. See, for example, issued US Patent No. 6,308,238 and US Patent No. 6,428,681, which each include similarly formatted claims. Therefore, Applicants request reconsideration and withdrawal of the objection to Claims 45-55.

Rejections Under 35 U.S.C. § 102

Claims 1-5 and 34-35 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rooks (US Patent No. 5,221,081).

Claims 1, 34, and 56 are amended herein to state that at least two launch devices are arranged along each dimension of the two dimensional array. In accordance with the agreement reached in the Interview Summary held June 9, 2003, Claims 1 and 34 (and 56) should no longer be anticipated by Rooks, because Rooks only discloses a one-by-three array.

Claims 2-5 depend from Claim 1 and Claim 35 depends from 34. Therefore, Claims 2-5 and 35 are distinguished from the cited prior art for at least the reasons provided above with respect to amended Claims 1 and 34.

For the above reasons Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 102.

Rejections Under 35 U.S.C. § 103 (Rooks reference)

Claims 6, 7, 11-12, 14-18, 45, and 46 are rejected under 35 U.S.C. § 103 as being unpatentable over Rooks (US 5,221,081).

Applicants respectfully traverse.

M.P.E.P. §2143 sets forth the requirements of a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must

be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

As amended herein, Claim 1 recites (in part) “a plurality of launch devices fixed to said support frame, said launch devices arranged in a two-dimensional array having at least two of said launch devices arranged along each dimension.” As indicated above, Rooks does not teach or suggest a plurality of launch devices arranged in a two dimensional array with at least two launch devices arranged along each dimension, and therefore cannot establish a prima facie case of obviousness with respect to amended Claim 1. Amended Claim 34 includes the same limitation as Claim 1 and is therefore distinguished from the cited prior art for at least the same reason.

Claims 6, 7, 11-12, and 14-18 depend either directly or indirectly from Claim 1, and therefore include the limitations of Claim 1. Claims 35, 45 and 46 depend, either directly or indirectly, from Claim 34, and therefore include the limitations of Claim 34. Thus, Claims 6, 7, 11-12, 14-18, 45, and 46 are distinguished from Rooks for at least the reason provided above with respect to Claims 1 and 34.

Claims 6 and 7

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With respect to Claims 6 and 7, Applicants assert that there is no suggestion or motivation to modify the device of Rooks to integrate the carrier and the engaging surfaces of Rooks together in a single part. As shown in FIG. 3 of Rooks, support flange 23 is mounted to the top of spring 22, and spring rods 24 are mounted to adjacent coils of spring 22. If the support flange 23 and spring rods 24 were integrated together, the functionality of spring 22 would be compromised. If spring rods 24 were integrated into a single solid member, spring 22 could not be fully compressed because the bottom-most spring rod 24 would abut the bottom of cylinder 13 and prevent further compression. Additionally, it appears that support flange 23 is simply a flat structure with insufficient vertical dimension to accommodate more than one such engaging surface, and would therefore limit the launch device to a single height setting.

Further, Rooks does not teach or suggest these limitations of Claims 6 and 7, and cannot therefore establish a prima facie case of obviousness with respect to Claim 6 or 7.

Claims 11-12, 14, and 16

With respect to Claim 11, Applicants assert that there is no suggestion or motivation to modify Rooks to provide “a top deck defining openings through which said balls are projected,” as recited in Claim 11. First, providing a top surface to the device of Rooks would impede [★] access to suction cups 27 by the user through each of access openings 15, 16, and 17 (column 3, lines 37-45), which is required to load the device. Additionally, such a top surface would make it difficult for the user to access adjuster cup 37, which also must be accessed through openings 15, 16, and 17 (column 4, lines 49-56). Finally, adding a top deck to this device would hinder the pivotability of the mounting plate 11.

For the above reasons, Applicants respectfully assert that there is no suggestion or motivation to modify the device of Rooks to include a top deck. Therefore, no prima facie case of obviousness is established with respect to Claim 11. Further, the cited reference simply does not teach or suggest this element, as is also required to establish a prima facie case of obviousness.

Claims 12 and 14 depend directly from Claim 11 and are distinguished from the cited prior art for at least the reasons given above with respect to Claim 11.

Claim 15:

With respect to Claim 15, Applicants respectfully assert that there is no suggestion or motivation to add a handle to the device of Rooks. The device of Rooks has a small, generally open structure that appears easy to grasp. Also, particular embodiments (e.g., FIGs. 5 and 6) of the device include pivoting cylinders that could potentially swing freely, causing injury or damage, if the device were carried by a handle. Therefore, there is no suggestion or motivation to add a handle to the device of by Rooks. Further, Rooks does not teach or suggest “a handle, coupled to said support frame, to facilitate transportation of said ball tossing apparatus,” as recited by Claim 15, which is a required element of the prima facie case of obviousness.

Claim 16:

Rooks does not teach or suggest a support frame “recessed in a floor of a permanent structure,” as recited by Claim 16. Further, there is no suggestion or motivation to recess the device of Rooks in the floor of a permanent structure, because such a modification would impede

access to suction cups 27 and adjuster cup 37 through openings 15, 16, and 17 as described above with respect to Claim 11. For both of these reasons, Applicants respectfully assert that no prima facie case of obviousness is established with respect to Claim 16.

Claims 17 and 18

Rooks does not teach or suggest a support frame including “indicia of a baseball home plate,” as recited by Claim 17. Further, there is no suggestion or motivation to so modify the device of Rooks. As shown in FIG. 1, the preferred embodiment of Rooks is intended to be used directly over a home plate. Therefore, the addition of such indicia would be redundant. Furthermore, the addition of such indicia would require additional structure be added the device of Rooks making the device unnecessarily large.

Claim 18 depends directly from Claim 17 and is distinguished from the cited prior art for at least the reasons provided with respect to Claim 17.

For the foregoing reasons, the cited reference does not establish a prima facie case of obviousness with respect to Claims 6,7, 11-12, 14-18, 45, and 46. Therefore, Applicants request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 of Claims 6,7, 11-12, 14-18, 45 and 46.

Rejections Under 35 U.S.C. § 103 (Rooks in view of Ciluffo et al.)

Claims 8 and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over Rooks in view of Ciluffo et al. (US Patent No. 5,857,451). The Examiner writes (in part):

“Rooks discloses a plate member serving as a carrier that is used in the launch device that is embodied inside a cup for holding the balls prior to launch. Rooks does not disclose the cup has conical interior surface for holding balls of varying diameters or that the cup comprises a plurality of stepped rings.

Ciluffo et al. teaches that it is desirable in a throwing device that the device not be limited to one sport (Column 1, lines 49-51). Ciluffo et al. teaches of a device that can throw objects such as baseballs, softballs, tennis balls, squash balls, handballs as well as disc objects like clay pigeons and hockey pucks in a single apparatus by allowing for conversion (Column 1, lines 60-67; Column 2, lines 1-2).

It would have been obvious to one of ordinary skill in the art at the time of invention to use the teaching of Ciluffo et al. to

adapt the Rooks device to accept objects from more than one sport.”

Applicants respectfully traverse.

Initially, Claim 8 depends indirectly from Claim 1 and is therefore distinguished from the Rooks reference for at least the reasons given above with respect to Claim 1.

Further, Rooks and Ciluffo et al. when combined do not teach or suggest a launch device including “a cup, having a conical interior surface, coupled to said coil spring for carrying balls of varying diameters,” as recited by Claim 8. In addition, Applicants disagree with the Examiner’s apparent interpretation that cylinder 13 can be fairly considered a cup. Rather, cylinder 13 can not be considered a cup for carrying balls because it is not coupled to, nor does it move with respect to spring 22. Furthermore, Ciluffo et al. also do not disclose a cup for carrying balls. Therefore, Applicants assert that the references when combined do not disclose the cup limitation of Claim 8, and therefore do not establish a prima facie case of obviousness with respect to Claim 8.

Furthermore, it should be noted that the device of Rooks would not need a cup to carry balls because, as shown in FIG. 3, ball 19 rests on the top of cylinder 13 and is not carried by support flange 23. Thus, the device of Rooks is already capable of launching balls of various sizes, and so there would be no motivation to modify the device.

Claim 9 depends directly from Claim 8 and is distinguished from the cited prior art for at least the reasons provided above with respect to Claim 8.

Because the references when combined do not establish a prima facie case of obviousness with respect to Claim 8 or Claim 9, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 8 and 9 under 35 U.S.C. § 103.

Rejections Under 35 U.S.C. § 103 (Rooks in view of Meade)

Claim 13 is rejected under 35 U.S.C. § 103 as being unpatentable over Rooks in view of Meade (US 5,294,109). The Examiner writes (in part):

“Rooks does not disclose a ball storage apparatus defined within the device.”

Meade discloses a ball tossing apparatus that tosses balls vertically in the air. Meade also discloses a ball storage apparatus for holding balls for the device.

It would have been obvious to one of ordinary skill in the art to incorporate a ball holding mechanism in the device of Rooks when embodied as discussed above with a protective top.”

Applicants respectfully traverse.

Initially, Claim 13 depends indirectly from Claim 1 and is therefore distinguished from the Rooks reference for at least the reasons given above with respect to Claim 1.

Additionally, as discussed above with respect to Claims 11 and 12, there would be no motivation for, nor does Rooks teach or suggest a need for a protective top. Additionally, when combined, Rooks and Meade do not disclose “a base and sides, said base and sides together with said top deck defining an interior of said support frame,” as disclosed by Claim 13.

Because the references when combined do not teach every element of the claimed invention, and/or because there is no suggestion or motivation to modify rooks to obtain the claimed invention, no prima facie case of obviousness is established with respect to Claim 13. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 of Claim 13.

Rejections Under 35 U.S.C. § 103 (Rooks in view of Battersby et al.)

Claims 19-33, 36-44, and 47-55 are rejected under 35 U.S.C. § 103 as being unpatentable over Rooks in view of Battersby et al. (US 6,546,924). The Examiner writes (in part):

“Rooks discloses a system that launches balls into the air for the user based upon how a suction cup is attached to a surface and when. However, one of ordinary skill in the art would immediately recognize some issues that would arise from this design. First, two suction cups could go off at once and cause the player to become confused as to what to do. Likewise, a long delay may occur waiting for the suction cup to go off, thus causing an undue wait for the player.

Battersby et al. disclose a ball-throwing machine with a method for sequentially launching a plurality of balls that has an electrical control system that can be programmed to store a pitch sequence (Column 3, lines 55-57).

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate an electronic control means as disclosed by Battersby et al. into the device of Rooks.”

Applicant respectfully traverses.

Claims 19-33:

Claims 19-33 depend either directly or indirectly from amended Claim 1, and therefore include the limitations of Claim 1. Additionally, Claim 19 recites:

19. A ball tossing apparatus according to Claim 1, further including an electronic control system comprising:
 - a processing unit for executing data and code; and
 - memory for storing data and code, said code including a launch module for sequentially activating said plurality of launch devices.

When combined the references do not teach or suggest “a launch module for sequentially activating said plurality of launch devices,” wherein the launch devices are “arranged in a two dimensional array having at least two of said launch devices arranged along each dimension,” as recited in Claim 19 and amended Claim 1. Further, there is no suggestion to combine the references, because they address two different kinds of launch devices. In particular, Rooks is directed to a device with multiple launchers, whereas Battersby et al. is directed to a device with a single launcher. The electronic controls of Battersby control the rotational speeds of a plurality of wheels, which in turn affects such aspects of each pitch as the type, speed, location, etc. The controls do not sequentially activate a plurality of launch devices.

Claims 20-33 depend either directly or indirectly from Claim 19, and are therefore distinguishable from the cited prior art for at least the same reasons as Claim 19.

Claims 36-44

Claims 36-44 depend either directly or indirectly from amended Claim 34, which recites:

34. A method for sequentially launching a plurality of balls, said method comprising:
 - loading said plurality of balls into a corresponding plurality of launch devices arranged in a two-dimensional array having at least two of said launch devices arranged along each dimension; and
 - launching said balls according to a launch sequence.

When combined, the references do not teach or suggest “launching a plurality of balls according to a launch sequence” from a “plurality of launch devices arranged in a two

dimensional array having at least two launch devices arranged along each dimension,” as recited by amended Claim 34. Therefore, no prima facie case of obviousness is established with respect to Claims 36-44, and Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 36-44 under 35 U.S.C. § 103.

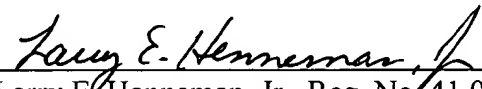
Claims 45-55:

Claims 45-55 each depend from a respective one of Claims 34-44, which for the reasons set forth above Applicants believe are now in condition for allowance. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 45-55 under 35 U.S.C. § 103.

For the foregoing reasons, Applicants believe Claims 1-56 are in condition for allowance. Should the Examiner undertake any action other than allowance of Claims 1-56, or if the Examiner has any questions or suggestions for expediting the prosecution of this application, the Examiner is requested to contact Applicants' attorney at (269) 279-8820.

Respectfully submitted,


Date: 9/9/03


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CERTIFICATE OF MAILING (37 CFR 1.8(A))

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Date: 9/9/03


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